# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/633,038 | 08/04/2003 | Shinobu Kanda | 60188-626 | 4697 |

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| EXAMINER |
|---|
| WHITMORE, STACY |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2825 | |

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>04 August 2003</u>.

2a)☐ This action is **FINAL**.    2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-11</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-11</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>04 August 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/4/2003</u>.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

## Claim Objections

1.      Claim1 is objected to because of the following informalities:

I. Claim 1 contains the phrase "converting and synthesizing".  From the claim, it is not clear what the conversion is, to what?

Appropriate correction is required.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.      Claims 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

I. In the claims:

3.      Claim 7 recites the limitation " the registered data in the database " in line 2. There is insufficient antecedent basis for this limitation in the claim.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.      Claims 1-5, and 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by
Nakamura (US Patent 6,304,790).


5.      As for claim 1, Nakamura discloses the invention as claimed, including, an LSI
development support system for generating design data and a document which are
consistent with each other [abstract, fig. 21, col. 6, lines 45-48; col. 13, lines 64-67; fig.
32]; the system comprising:

6.      A database which includes design data and document data for modules serving
as LSI design assets, the design data and the document data being mutually related on
a module-by-module basis [abstract, fig. 21, col. 6, lines 45-48; fig. 20; fig. 23; fig. 32;
fig. 21];

7.      An input interface unit for inputting necessary information [fig. 1, element 4];

8.      A detailed specific preparation temporary for preparing detailed specific
management information, which indicates the configuration of modules forming an LSI
to be developed, and individual detailed specifics for each said module of the LSI,
based on the information inputted in the input interface unit [fig. 21, col. 5, lines 13-16;
col. 9, lines 35-45, parameter template specific; col. 14, lines 26-40];

9.      A database selection unit for extracting, from the database, design data and
document data for the modules specified in the detailed specific management
information [fig. 19, col. 6, lines 45-48, col. 15, lines58-60, the creation of the HDL
netlist shows the extraction and synthesis; col. 12, fig. 32]; and

10.     A data conversion and synthesis unit for converting and synthesizing the
extracted design and document data base on the individual detailed specifics [fig. 19,
col. 6, lines 45-48, col. 15, lines58-60, the creation of the HDL netlist shows the
extraction and synthesis].


11.     As for claim 2, Nakamura discloses detailed specific templates which are
associated with the module-by-module design data and document data [fig. 21,
templates]; and

12.     The database selection unit  also functions to extract, from the database, associated ones of the detailed specific templates for the modules specified in the input interface unit and then transmit the extracted templates to the detailed specific preparation temporary so that the individual detailed specifics can be prepared by filling in blanks in the detailed specific templates [fig. 21, col. 17-18, property and template tables and entry].

13.     As for clam 3, Nakamura discloses management data for associating the module-by-module detailed specific templates, design data, and document data with each other [col. 12].

14.     As for claim 4, Nakamura discloses operation manual data

15.     As for claim 5, Nakamura discloses product specification data [abstract].

16.     As for claim 7, Nakamura discloses means for utilizing mutually related design data and document data other than the registered data in the database [col. 19, lines 30-35; col. 21].

17.     As for claim 8, Nakamura discloses a data correction unit for correcting the results of the conversion or synthesis [col. 19, line 35 – col. 20, line 43; col. 5, line 47 – col. 6, line 6].

18.     As for claim 9, Nakamura discloses version data which is associated with the module-by-module design and documents data [col. 12; col. 19, line 35 – col. 20, line 43; col. 5, line 47 – col. 6, line 6], and
19.     The data correction unit includes means for determining, based on the version data, whether the conversion or synthesis need to be corrected or not [col. 12; col. 19, line 35 – col. 20, line 43; col. 5, line 47 – col. 6, line 6].

20.     As for claims 10-11, Nakamura discloses means for correcting text data for a
document to be generated before or after the text/ data is laid out [col. 12; col. 19, line
35 – col. 20, line 43; col. 5, line 47 – col. 6, line 6].

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or
described as set forth in section 102 of this title, if the differences between the subject
matter sought to be patented and the prior art are such that the subject matter as a
whole would have been obvious at the time the invention was made to a person having
ordinary skill in the art to which said subject matter pertains.  Patentability shall not be
negatived by the manner in which the invention was made.

21.     Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over
Nakamura (US Patent 6,304,790) in view of Bloom (US Patent 6,810,508).

22.     As for claim 4, Nakamura does not specifically disclose operation manual data.

23.     Bloom discloses operation manual data [fig. 3, "help"].

24.     It would have been obvious to one of ordinary skill in the art at the time the
invention was made to combine the teachings of Nakamura and Bloom because having
operation manual data would aid designers using the design system in situations where
the design system has unknown formatting or steps used in design which would
improve the overall design system by aiding designers.

25.     Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over
Nakamura (US Patent 6,304,790) in view of McElvain (US Patent 6,449,762).

26.     As for claim 6, Nakamura discloses the invention as claimed, including, an LSI
development support system for generating design data and a document as cited in the
rejection of claim 1.

27.     Nakamura does not specifically disclose converting the extracted document data
into a data format with tags and synthesizing the result.

28.     Bloom discloses converting extracted document data into a data format with tags
and synthesizing the result [col. 4, lines 45-60; col. 9, lines 45-60, the HDL text
representations to RTL representations are a a synthesis, and the tag data is generated
prior to synthesis].

29.     It would have been obvious to one of ordinary skill in the art at the time the
invention was made to combine the teachings of Nakamura and McElvain because
converting converting the extracted document data into a data format with tags and
synthesizing the result would improve Nakamura's system by providing a way of
keeping track of the synthesis of text from one form to another which would aid the
optimization process [see McElvain, col. 9, lines 45-65

30.     Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Stacy A. Whitmore whose telephone number is (571)
272-1685.  The examiner can normally be reached on Monday-Thursday, alternate
Friday 6:30am - 4:00 pm.
If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Matthew Smith can be reached on (571) 272-1907.  The fax phone number
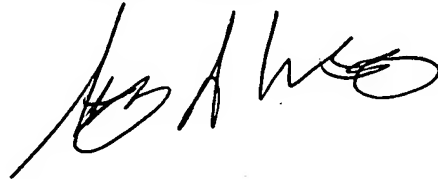for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent
Application Information Retrieval (PAIR) system. Status information for published
applications may be obtained from either Private PAIR or Public PAIR. Status
information for unpublished applications is available through Private PAIR only. For
more information about the PAIR system, see http://pair-direct.uspto.gov. Should you
have questions on access to the Private PAIR system, contact the Electronic Business
Center (EBC) at 866-217-9197 (toll-free).

Stacy A Whitmore
Primary Examiner
Art Unit 2825

SAW